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CLAIMS:

1. An electronic device workpiece comprising:  
a substrate having a surface;  
a temperature sensing device borne by the substrate; and  
an electrical interconnect provided upon the surface of the  
substrate, the electrical interconnect being electrically coupled with the  
temperature sensing device.

2. The electronic device workpiece according to claim 1 further  
comprising a wire connection adapted to electrically connect the  
electrical interconnect and the temperature sensing device.

3. The electronic device workpiece according to claim 1  
wherein the electrical interconnect contacts the temperature sensing  
device.

4. The electronic device workpiece according to claim 1  
wherein the workpiece has an edge and the electrical interconnect  
extends from the temperature sensing device to the edge of the  
electronic device workpiece.

1           5.     The electronic device workpiece according to claim 1 further  
2 comprising a cavity including plural sloped sidewalls and a bottom wall  
3 within the substrate, the temperature sensing device being provided  
4 within the cavity.

5  
6           6.     The electronic device workpiece according to claim 5  
7 wherein the sidewalls are sloped at an angle within the approximate  
8 range of fifty to sixty degrees with respect to the surface of the  
9 substrate.

10  
11          7.     The electronic device workpiece according to claim 1 further  
12 comprising an isolator intermediate the surface of the electronic device  
13 workpiece and individual ones of the electrical interconnect and the  
14 temperature sensing device.

15  
16          8.     The electronic device workpiece according to claim 1 further  
17 comprising an interface connection in electrical connection with the  
18 electrical interconnect, the interface connection being configured to  
19 provide electrical coupling of the electrical interconnect and the  
20 temperature sensing device with circuitry external of the electronic  
21 device workpiece.

22  
23          9.     The electronic device workpiece according to claim 1  
24 wherein the electrical interconnect comprises a conductive trace.

1           10. The electronic device workpiece according to claim 1  
2 wherein the temperature sensing device comprises a resistance  
3 temperature device.

4  
5           11. The electronic device workpiece according to claim 1  
6 wherein the substrate includes a via and a conductor within the via  
- configured to electrically couple with the electrical interconnect.

8  
9           12. The electronic device workpiece according to claim 1 further  
10 comprising plural additional temperature sensing devices borne by the  
11 substrate.

12  
13           13. The electronic device workpiece according to claim 1  
14 wherein the electronic device workpiece comprises a calibration  
15 workpiece.

16  
17           14. The electronic device workpiece according to claim 1  
18 wherein the substrate comprises a semiconductive substrate.

19  
20           15. The electronic device workpiece according to claim 1  
21 wherein the substrate comprises silicon.

22  
23           16. The electronic device workpiece according to claim 1  
24 wherein the substrate comprises silicon carbide.

1        17. The electronic device workpiece according to claim 1  
2 wherein the substrate comprises gallium nitride.

3  
4        18. An electronic device workpiece comprising:  
5 a substrate having a surface;  
6 a cavity formed in the substrate, the cavity having sidewalls sloped  
7 at an angle within an approximate range of fifty to sixty degrees with  
8 respect to the surface of the substrate;  
9 a temperature sensing device within the cavity of the substrate;  
10 and  
11 an electrical interconnect coupled with the temperature sensing  
12 device.

13  
14        19. The electronic device workpiece according to claim 18  
15 wherein the electrical interconnect is formed upon the surface of the  
16 substrate.

17  
18        20. The electronic device workpiece according to claim 18  
19 further comprising a wire connection electrically connecting the electrical  
20 interconnect and the temperature sensing device.

21  
22        21. The electronic device workpiece according to claim 18  
23 wherein the electrical interconnect contacts the temperature sensing  
24 device.

1           22. The electronic device workpiece according to claim 18  
2 wherein the workpiece has an edge and the electrical interconnect  
3 extends from the temperature sensing device to the edge of the  
4 electronic device workpiece.

5  
6           23. The electronic device workpiece according to claim 18  
7 wherein the sidewalls are sloped at approximately fifty-four degrees.

8  
9           24. The electronic device workpiece according to claim 18  
10 wherein the electronic device workpiece comprises a semiconductor  
11 wafer.

12  
13           25. The electronic device workpiece according to claim 18  
14 wherein the electronic device workpiece comprises a calibration  
15 workpiece.

16  
17           26. The electronic device workpiece according to claim 18  
18 wherein the electrical interconnect comprises a conductive trace.

19  
20           27. The electronic device workpiece according to claim 18  
21 wherein the temperature sensing device comprises a resistance  
22 temperature device.

1           28. A semiconductor workpiece comprising:  
2           a semiconductive substrate having a surface;  
3           a temperature sensing device borne by the substrate; and  
4           an electrical interconnect provided upon the surface of the  
5 substrate, the electrical interconnect being electrically coupled with the  
6 temperature sensing device.

7  
8           29. The semiconductor workpiece according to claim 28 further  
9 comprising a cavity including plural sloped sidewalls and a bottom wall  
10 within the substrate, the temperature sensing device being provided  
11 within the cavity.

12  
13           30. The semiconductor workpiece according to claim 28 wherein  
14 the electrical interconnect comprises a conductive trace.  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24

1           31. A semiconductor workpiece comprising:  
2           a substrate having a surface and an edge;  
3           a cavity formed in the substrate, the cavity having sidewalls sloped  
4 at an approximate fifty-four degree angle with respect to the surface of  
5 the substrate;  
6           a resistance temperature device within the cavity of the substrate;  
7           a plurality of conductive traces coupled with the resistance  
8 temperature device, the conductive traces being formed upon the surface  
9 of the substrate to contact the resistance temperature device, the  
10 conductive traces being configured to electrically couple the resistance  
11 temperature device with the edge of the substrate;  
12           an isolator intermediate the surface of the electronic device  
13 workpiece and the conductive traces and the resistance temperature  
14 device; and  
15           an interface connection in electrical connection with the conductive  
16 traces, the interface connection being configured to provide electrical  
17 coupling of the resistance temperature device with circuitry external of  
18 the semiconductor workpiece.  
19  
20  
21  
22  
23  
24



1           32. A method of sensing temperature of an electronic device  
2       workpiece comprising:

3           providing an electronic device workpiece;

4           supporting a temperature sensing device using the electronic device  
5       workpiece;

6           providing an electrical interconnect upon a surface of the  
7       electronic device workpiece;

8           electrically coupling the electrical interconnect with the temperature  
9       sensing device; and

10          sensing temperature of the electronic device workpiece using the  
11       temperature sensing device.

12  
13          33. The method according to claim 32 further comprising wire  
14       bonding the electrical interconnect and the temperature sensing device.

15  
16          34. The method according to claim 32 further comprising:

17          forming a cavity in the electronic device workpiece; and

18          providing the temperature sensing device within the cavity.

19  
20          35. The method according to claim 34 wherein the forming the  
21       cavity comprises anisotropically etching the electronic device workpiece.

22  
23          36. The method according to claim 34 wherein the forming the  
24       cavity comprises isotropically etching the electronic device workpiece.

1           37. The method according to claim 32 further comprising  
2 forming the temperature sensing device.

3  
4           38. The method according to claim 37 wherein the forming the  
5 temperature sensing device comprises forming a resistance temperature  
6 device.

7  
8           39. The method according to claim 32 further comprising  
9 electrically coupling the electrical interconnect with external circuitry.

10  
11           40. The method according to claim 32 further comprising  
12 electrically coupling the temperature sensing device with an edge of the  
13 electronic device workpiece using the electrical interconnect.

14  
15           41. The method according to claim 32 wherein the providing the  
16 electrical interconnect comprises forming a conductive trace.

17  
18           42. The method according to claim 32 further comprising  
19 contacting the electrical interconnect with the temperature sensing device.

20  
21           43. The method according to claim 32 wherein the method  
22 comprises a method of sensing temperature of semiconductor wafers.

1 44. A method of semiconductor processing, comprising:  
2 providing a semiconductor substrate;  
3 anisotropically etching a cavity in the semiconductor substrate; and  
4 providing a temperature sensing device within the cavity of the  
5 semiconductor substrate.

6  
7 45. The method according to claim 44 further comprising:  
8 providing an electrical interconnect upon a surface of the  
9 semiconductor substrate; and  
10 electrically coupling the electrical interconnect with the temperature  
11 sensing device.

12  
13 46. The method according to claim 45 wherein the providing the  
14 electrical interconnect comprises forming a conductive trace.

15  
16 47. The method according to claim 45 wherein the electrically  
17 coupling comprises wire bonding the electrical interconnect and the  
18 temperature sensing device.

19  
20 48. The method according to claim 45 wherein the electrically  
21 coupling includes contacting the electrical interconnect and the  
22 temperature sensing device.

1           49. The method according to claim 45 further comprising  
2 electrically coupling the electrical interconnect with circuitry external to  
3 the semiconductor substrate.

4  
5           50. The method according to claim 45 further comprising  
6 electrically coupling the temperature sensing device with an edge of the  
7 semiconductor substrate using the electrical interconnect.

8  
9           51. The method according to claim 44 wherein the providing  
10 comprises forming the temperature sensing device within the cavity.

11  
12           52. The method according to claim 44 wherein the providing  
13 comprises positioning the temperature sensing device within the cavity.

14  
15           53. A method of sensing temperature of an electronic device  
16 workpiece comprising:

17           providing an electronic device workpiece;

18           forming a temperature sensing device upon the electronic device  
19 workpiece, the forming including providing the temperature sensing  
20 device in a temperature sensing relation with the electronic device  
21 workpiece; and

22           sensing the temperature of the electronic device workpiece using  
23 the temperature sensing device.

24

1           54. The method according to claim 53 further comprising:  
2           providing an electrical interconnect upon the electronic device  
3           workpiece; and  
4           electrically coupling the electrical interconnect with the temperature  
5           sensing device.

6  
7           55. The method according to claim 54 wherein the providing the  
8           electrical interconnect comprises forming a conductive trace.

9  
10          56. The method according to claim 54 wherein the electrically  
11          coupling comprises wire bonding the electrical interconnect and the  
12          temperature sensing device.

13  
14          57. The method according to claim 54 wherein the electrically  
15          coupling includes contacting the electrical interconnect and the  
16          temperature sensing device.

17  
18          58. The method according to claim 53 further comprising:  
19          forming a cavity in the electronic device workpiece; and  
20          providing the temperature sensing device within the cavity.

21  
22          59. The method according to claim 58 wherein the forming the  
23          cavity comprises anisotropically etching the electronic device workpiece.  
24

1           60. The method according to claim 53 wherein the forming  
2 comprises forming a resistance temperature device.  
3

4           61. The method according to claim 53 further comprising  
5 forming plural temperature sensing devices upon the electronic device  
6 workpiece.  
7

8           62. A method of sensing temperature of an electronic device  
9 workpiece comprising:

10           providing an electronic device workpiece;

11           supporting a temperature sensing device using the electronic device  
12 workpiece;

13           providing the temperature sensing device in a temperature sensing  
14 relation with the electronic device workpiece;

15           providing an electrical interconnect upon a surface of the  
16 electronic device workpiece; and

17           electrically coupling the electrical interconnect with the temperature  
18 sensing device.  
19

20           63. The method according to claim 62 wherein the coupling  
21 comprises wire bonding the electrical interconnect and the temperature  
22 sensing device.  
23  
24

1           64. The method according to claim 62 wherein the coupling  
2 comprises contacting the electrical interconnect with the temperature  
3 sensing device.

4  
5           65. The method according to claim 62 further comprising:  
6 forming a cavity in the electronic device workpiece; and  
7 providing the temperature sensing device within the cavity.

8  
9           66. The method according to claim 65 wherein the forming the  
10 cavity comprises anisotropically etching the electronic device workpiece.

11  
12           67. The method according to claim 62 further comprising  
13 forming a temperature sensing device upon the electronic device  
14 workpiece.

15  
16           68. The method according to claim 62 further comprising  
17 electrically coupling the electrical interconnect with circuitry external to  
18 the electronic device workpiece.

19  
20           69. The method according to claim 62 further comprising  
21 electrically coupling the temperature sensing device with an edge of the  
22 electronic device workpiece using the electrical interconnect.

1        70. The method according to claim 62 wherein the providing the  
2        electrical interconnect comprises forming a conductive trace.  
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